IN THE CLAIMS

Claims 10-24 are pending in this application. Claims 1-9 have been canceled. Claims 10-24 have been added.

1-9 (Canceled)

10. (New) An apparatus comprising:

an upper surface and a lower surface that are substantially parallel to each other, one of the said surfaces being fixed and the other surface being moveable relative to the fixed surface in response to applied force;

electrodes attached to each of the said upper and lower surfaces;

a variable capacitor attached to the electrodes which measures the capacitance between the two surfaces;

electric circuitry to provide an electrical output in response to changed capacitance;

a helical spring forming a spring assembly; and

the said spring assembly positioned between the upper surface and the lower surface to form a capacitive force sensing device.

11. (New) An apparatus comprising:

an upper surface and a lower surface that are substantially parallel to each other, one of the said surfaces being fixed and the other surface being moveable relative to the fixed surface in response to applied force;

electrodes attached to each of the said upper and lower surfaces;

a variable capacitor attached to the electrodes which measures the capacitance between the two surfaces;

electric circuitry to provide an electrical output in response to changed capacitance;

a spring assembly which deflects longitudinally in the direction of an applied force, and transversely to the direction of the applied force such that the transverse

deflection does not touch any portion of the upper surface and the lower surface; and

the said spring assembly positioned between the upper surface and the lower surface to form a capacitive force sensing device.

12. (New) The apparatus of Claim 11 further comprising a conical washer to form the spring assembly.

13. (New) The apparatus of Claim 11 further comprising a conical washer having an inside edge that is thicker than an outside edge of the conical washer (also known in the art as Belleville springs) to form the spring assembly.

14. (New) The apparatus of claim 11, further comprising a plurality of conical washers stacked to form the spring assembly.

15. (New) The apparatus of Claim 11 further comprising two conical washers placed on top of each other, base to base, to form the spring assembly.

16. (New) The apparatus of Claim 11 further comprising multiple base to base conical washers placed on top of each other along the same axis to form the spring assembly

17. (New) The apparatus of Claim 15 where the top surface and the bottom surface of the spring assembly have less width compared to a middle portion of the spring assembly.

18. (New) The apparatus of Claim 16 where the top surface and the bottom surface of the spring assembly have less width compared to a middle portion of the spring assembly.

19. (New) The apparatus of Claim 11 further comprising multiple base to base conical washers placed side by side in the same plane to form the spring assembly

20. (New) The apparatus of Claim 14 where the transverse movement of the conical washers is negligible in the planes where the conical washers are in contact with the lower and upper surfaces and also in the planes where the conical washers are in contact with each other.

21. (New) The apparatus of Claim 11 where the spring assembly has a large base compared to its height combined with a large flat top surface.

22. (New) The apparatus of Claim 11 where the spring assembly is perforated, slotted, or combination of perforated and slotted.

23. (New) The apparatus of Claim 11 where the conical washers are hollow

24. (New) A method comprising:

placing a fixed surface and a moveable surface substantially parallel to each other;

permitting the moveable surface to move in response to a force applied perpendicular to the moveable surface;

attaching electrodes to both the fixed and the moveable surfaces;

attaching a variable capacitor which measures the capacitance between the two surfaces;

positioning a spring assembly which deflects longitudinally in the direction of an applied force, and transversely to the direction of the applied force such that the transverse deflection does not touch any portion of the upper surface and the lower surface; and

measuring the applied force by measuring the capacitance using the variable capacitor.